

Serial No. 10/721,943  
Atty Docket No. 65,221-008

**AMENDMENTS TO THE DRAWINGS**

Please enter the attached drawing sheet to reflect the corrected formal drawings.

Figure 14 is being added to the application to illustrate a fluid flow restrictor being disposed in both end connections of one of the crossover conduits.

## **REMARKS**

### **I. INTRODUCTION**

Claims 17-21, 23-28 and 30 are presently pending in this application, with claims 17 and 23 having been previously withdrawn from consideration. Claims 18-21, 24-28 and 30 currently stand rejected. Applicants respectfully request further examination and reconsideration of the application in light of the amendments made above and the arguments that appear below.

### **II. AMENDMENTS TO CLAIMS**

Applicants have amended claim 18 to better clarify and describe Applicants' invention. Applicants respectfully submit that support for the amendments made can be found throughout the specification and drawings, and accordingly, no new matter has been added.

### **III. AMENDMENTS TO THE DRAWING**

Figure 14 was submitted in Applicants' prior response, however, it was not approved because the new sheet was not labeled as such. Accordingly, Applicants' are resubmitting Figure 14 to illustrate a fluid flow restrictor being disposed in both end connections of one of the crossover conduits. Applicants respectfully submit that support for this addition and the subject matter disclosed therein can be found in paragraph [0035] of the specification and claim 28. Accordingly, no new matter is being added by way of the addition of Figure 14.

### **IV. REJECTION OF CLAIMS 18-21 AND 28 UNDER 35 U.S.C. § 102(e)**

Claims 18-21 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Hiraku et al. (U.S. Patent No. 6,505,608). The Office asserts that Hiraku et al. show a fuel rail assembly including first and second fuel rails 53a, 53b; two crossover conduits 57, 58; fluid flow restrictors 58, 58' in one of the crossover conduits; and at least one fuel rail having an inlet 58 or 58' for receiving pressurized fuel. The Office further asserts that Hiraku et al. disclose the two crossover tubes being non-symmetric with one another. For at least the following reasons, Applicants respectfully traverse this rejection.

With respect to independent claim 18, as amended, Applicants respectfully submit that the cited reference fails to disclose each and every recited limitation. Applicants respectfully submit that the cited reference fails to disclose the limitation of a fuel inlet in one

of the two fuel rails as is positively recited in the claim. More specifically, Applicants respectfully submit that Hiraku et al. fail to disclose a fuel rail assembly comprised, in part, of: (i) first and second fuel rails wherein the fuel rails have a first set of orifice outlets located at respective first ends of the fuel rails; (ii) a second set of orifice outlets located at respective second ends of the fuel rails opposite the first ends; and (iii) a fuel inlet in one of the two fuel rails that is different from and located away from each of the sets of orifices in the fuel rails, and that is configured to receive pressurized fuel directly from a low pressure fuel pump wherein the fuel has a pressure of about 60 psi.

Rather, Applicants respectfully submit that Hiraku et al. at most disclose a fuel supply system that includes two fuel rails (53a, 53b), a fuel delivery conduit (59) connected between a high pressure fuel pump and the orifices at one end of each fuel rail, and a connecting pipe located between the fuel rails at a second end of the fuel rails opposite the first end. (See Hiraku et al., col. 7, lines 21-28). It is clear from both the written description and drawings of the cited reference that Hiraku et al. fail to disclose a fuel inlet that is different from and located away from each of the sets of orifices in the fuel rails, and that is also configured to receive pressurized fuel directly from a low pressure pump. Accordingly, the Office's correlation of the orifices in the Hiraku et al. reference with the fuel inlet of the present invention is inaccurate since Applicants' invention also includes orifices in the fuel rails to allow fuel communication therebetween, while also including a separate and distinct fuel inlet in the fuel rail itself. Therefore, the cited reference fails to disclose the fuel inlet limitation as recited in claim 18.

Further, Hiraku et al. expressly provide that the fuel delivery conduit is connected between the output of a high pressure fuel pump (See Figs. 9a-9c where a pressure on the order of 10 MPa (1450 psi) is disclosed) and the fuel rails. Accordingly, the positively recited limitation of Applicants' invention of the fuel inlet being configured to receive fuel directly from a low pressure pump is not disclosed by the cited reference.

Accordingly, for at least the reason that the cited reference fails to disclose each and every recited limitation of claim 18, as amended, Applicants respectfully submit that this rejection has been overcome.

With respect to claims 19-21 and 28, Applicants respectfully submit that these claims depend from base claim 18 (believed allowable), and therefore, include each and every limitation thereof. Therefore, for at least the reasons set forth above with respect to the

allowability of independent claim 18, Applicants respectfully submit that the rejection of these claims has been overcome.

Accordingly, in light of the foregoing, Applicants respectfully request that the rejection of claims 18-21 and 28 be reconsidered and withdrawn.

**V. REJECTION OF CLAIMS 24-27 UNDER 35 U.S.C. § 103(a)**

Claims 24-27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hiraku et al. (U.S. Patent No. 6,505,608) in view of Schwegler et al. (U.S. Patent No. 6,431,149) or Lorraine (U.S. Patent No. 5,168,856). The Office asserts that Hiraku et al. show the invention substantially as claimed, however, do not specifically show the connector fitting details between the fuel rail and the crossover conduit. The Office asserts that Schwegler et al. teach a connector 4 as a male barbed member having a flow restrictor within section 15 and elastic tubular bodies such as a polymeric hose connected thereto. The Office further asserts that Lorraine also teaches a connector 28 as a male barbed member having a flow restrictor (internal narrowed passage) and polymeric hose connected thereto. Accordingly, the Office asserts that it would have been obvious at the time of the invention for one of ordinary skill in the art to have modified the fuel rail assembly of Hiraku et al. to include the teachings of either Schwegler et al. or Lorraine in that such connectors are well known in the art for fuel rails and crossover conduits in order to provide a secure connection and a flexible conduit to allow manipulation if necessary for fitting within an engine compartment. For at least the following reasons, Applicants respectfully traverse this rejection.

Claims 24-27 depend from independent claim 18, and therefore, include each and every limitation thereof. Accordingly, for at least the reasons set forth above with respect to the allowability of claim 18, Applicants respectfully submit that the rejection of claims 24-27 has been overcome. Therefore, Applicants respectfully request that this rejection be reconsidered and withdrawn.

**VI. REJECTION OF CLAIMS 30 UNDER 35 U.S.C. § 103(a)**

Claim 30 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Hiraku et al. (U.S. Patent No. 6,505,608). The Office asserts that Hiraku et al. show the invention substantially as claimed, however, do not specifically mention the pressure range of the pressurized fuel. Accordingly, the Office asserts that it would have been obvious at the time

Serial No. 10/721,943  
Atty Docket No. 65,221-008

of the invention for one of ordinary skill in the art to have provided the fuel rail assembly of Hiraku et al. in order to provide the pressurized fuel to be in the range of 45-60 psi in that such are well known pressure ranges within the art and a matter of obvious choice of design. For at least the following reasons, Applicants respectfully traverse this rejection.

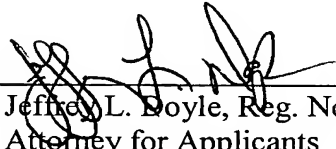
Claim 30 depends from independent claim 18, and therefore, includes each and every limitation thereof. Accordingly, for at least the reasons set forth above with respect to the allowability of claim 18, Applicants respectfully submit that the rejection of claim 30 has likewise been overcome. Therefore, Applicants respectfully request that this rejection be reconsidered and withdrawn.

## **VII. CONCLUSION**

Applicants respectfully submit that all pending claims are now in condition for allowance. If the Office has any further questions regarding this matter, please contact Applicants' undersigned attorney.

Respectfully submitted,

Date: 10/11/05

By:   
Jeffrey L. Doyle, Reg. No. 54,074  
Attorney for Applicants  
Dykema Gossett PLLC  
39577 Woodward Avenue, Suite 300  
Bloomfield Hills, MI 48304  
(248) 203-0782  
[ipmail@dykema.com](mailto:ipmail@dykema.com)

BH01\557606.1  
IDVLD0